

# Ch 6 Review

p 323 7, 9; p 333-336 17, 22, 26, 35  
p 337 10-12

Set up  
Don't solve

$$7. \frac{5}{7} = \frac{10}{14} = \frac{18-x}{x}$$

$$5x = 7(18-x)$$

$$5x = 126 - 7x$$

$$12x = 126$$

$$x = 10.5$$

$$9. \frac{2x}{5} = \frac{10}{x}$$

$$2x^2 = 50$$

$$x^2 = 25$$

$$x = \pm 5$$

$$x = 5$$

$$17. 2x + 7x = 108$$

$$9x = 108$$

$$x = 12$$

$$24 \text{ in } 84 \text{ in}$$

$$22. \text{ yes } SA \sim \Delta ABC \sim \Delta DFE$$

$$23. \text{ yes } AA \sim \Delta GHI \sim \Delta GJK$$

$$24. \text{ No}$$

$$25. \Delta ABC \sim \Delta DEC (AA \sim)$$

$$\frac{BC}{EC} = \frac{AC}{DC} \quad \frac{x+3}{11x-2} = \frac{1}{6}$$

$$6x+18 = 11x-2$$

$$26 = 5x$$

$$4 = x$$

$$26. \Delta STU \sim \Delta VTR$$

$$\frac{ST}{VT} = \frac{TU}{TR} \quad \frac{4}{x+5} = \frac{x+2}{2x+4}$$

$$8x+16 = x^2+7x+10$$

$$0 = x^2 - x - 6$$

$$(x-3)(x+2)$$

Do NOT  
SOLVE!

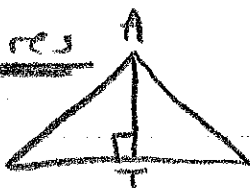
$$35. P = 16$$

$$\frac{2}{3} = \frac{16}{p}$$

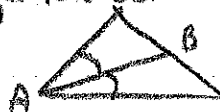
$$p = 24$$

Pictures

Altitude  
AT



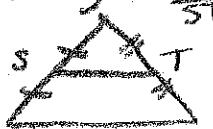
Angle Bisector  
AB



Median  
MD



Midsegment  
ST



p 337

$$\Delta PQR \sim \Delta PST$$

$$\frac{2x+2}{2x+8} = \frac{7x}{15}$$

$$\frac{6}{3} = \frac{10}{5} = \frac{12}{6} \checkmark$$

$$\Delta MNL \sim \Delta PRQ$$

yes SSS ~

$$11. \text{ No}$$

$$12. \text{ yes } AA \sim \Delta AED \sim \Delta ACB$$